

# **DEPARTMENT OF THE AIR FORCE**

# HEADQUARTERS AIR COMBAT COMMAND JOINT BASE LANGLEY-EUSTIS VA

# AFI21-101 COMBATAFSUP ADDENDUM B CAFGM1

27 June 2013

# MEMORANDUM FOR DISTRIBUTION C MAJCOMs/FOAs/DRUs

FROM: ACC/A4

SUBJECT: Combat Air Force Guidance Memorandum to AFI21-101\_CAFSUP\_ADD\_B, Aircraft and Equipment Maintenance Management (F-35)

By Order of the Air Combat Commander, this is a CAF Guidance Memorandum immediately implementing changes to AFI 21-101\_CAFSUP\_ADDENDUM\_B, *Aircraft and Equipment Maintenance Management (F-35)*. Changes incorporate maintenance and equipment management processes outlined in recently released source data. Compliance with this Memorandum is mandatory. To the extent its directions are inconsistent with other Air Force publications; the information herein prevails, in accordance with AFI 33-360, *Publications and Forms Management*.

In advance of a rewrite for AFI 21-101\_CAFSUP, ADDENDUM B, the Attachment to this Memorandum is updated to provide guidance changes that are effective immediately.

This memorandum becomes void after one year has elapsed from the date of this memorandum or upon publication of an incorporation of an Interim Change or rewrite of AFI 21-101 CAFSUP, ADDENDUM B, whichever is earlier.

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Attachment Guidance Changes

#### **ATTACHMENT**

#### **Guidance Changes**

- (Add New) 1.3.2. Prognostic Maintenance Inspections.
- (Add New) 1.3.2.1. Prognostic Maintenance Inspections are based on life limits typically assigned to specific PN/SNs. These inspections are heavily dependent on PHM and will be viewable and tracked in the same manner as scheduled maintenance inspections.
- (Add New) 1.3.3. O+ Maintenance. SOI 1505.06.
- (Add New) 1.3.3.1. The F-35 Joint Program employs a 2 level maintenance concept defined as organizational and depot levels of maintenance. Within the Organizational level, there are on-aircraft and O+ maintenance tasks
- (Add New) 1.3.3.2. O+ Scheduled Maintenance:
- (Add New) 1.3.3.2.1. Scheduled maintenance requirements for off equipment will be listed within applicable JTD.
- (Add New) 1.3.3.2.2. O+ scheduled maintenance can be documented and tracked for particular assets as detailed below:
- (Add New) 1.3.3.2.2.1. SE scheduled maintenance will be managed, tracked and documented within Computerized Maintenance Management System (CMMS).
- (Add New) 1.3.3.2.2.2. Alternate Mission Equipment (AME) scheduled maintenance will be documented, tracked and managed within CMMS.
- (Add New) 1.3.3.2.2.3. O+ propulsion maintenance will be documented, tracked and managed using the Propulsion Workstation.
- (Add New) 1.3.3.2.3. Scheduled maintenance tracking of parts not specified above are not tracked within CMMS/Squadron Health Management (SHM). Tracking and managing of scheduled inspections/shelf life of these same items while they are not installed on an Air Vehicle (AV) will be tracked in either SCM as shelf life tracked item or external to ALIS. For example, the tracking of a 90 day charge life of a battery required to be in a Ready For Issue condition (while it is not installed on an AV) is not tracked within CMMS/SHM.
- (Replace Existing) **1.4.** Use of Joint Technical Data (JTD). Verified JTD will be used for all maintenance actions/procedures. Where there is JTD that has not been authored or verified, refer to established procedures. SOI 1511.01.
- (Add New) 1.4.3. Support Equipment Maintenance Matrix (SEMM). SOI 1508.09.

- (Add New) 1.4.3.1. The primary source for technical data used by authorized personnel to conduct maintenance for SE is verified JTD.
- (Add New) 1.4.3.2. For SE maintenance tasks that have not yet had JTD released and verified, SEMMs will be released via the disseminated SEMM in DVD format.
- (Add New) 1.4.3.2.1. The SEMMs identify the approved technical data that is to be used for a given SE maintenance task. The SEMMs do not contain SE operational tasks, procedures, or documentation. The SEMMs only contain SE maintenance and repair tasks and related documentation.
- (Add New) 1.4.3.3. The SEMMs are standalone, ASC configuration-managed, protected Microsoft Excel files intended to be used as cross reference tools for SE authorized persons to assist in determining whether or not a particular SE maintenance task is authorized (when no released/verified JTD is available).
- (Add New) 1.4.3.3.1. The referenced SE maintenance technical data in the SEMM is comprised of Original Equipment Manufacturer (OEM) and/or vendor Operation & Maintenance (O&M) manuals, Department of Defense (DoD) Service SE technical publications and ASC-authored work cards.
- (Add New) 1.4.3.4. If SE JTD data modules exist, the authorized person identifies whether it is Verified or Unverified.
- (Add New) 1.4.3.4.1. If SE JTD modules are available but are identified as "Unverified," the authorized person shall follow procedures outlined in SOI 1511.01.
- (Add New) 1.4.3.4.2. If SE JTD modules are available and identified as "Verified," the authorized person shall perform maintenance in accordance with the instructions, and then close the work order.
- (Add New) 1.4.3.5. If no SE JTD is authored the authorized person selects the applicable Unscheduled or Preventative Maintenance SEMM.
- (Add New) 1.4.3.6. If the authorized person identifies a discrepancy (e.g. does not find a task and applicable reference) in the Unscheduled and/or Preventative SEMM, he/she shall submit an AR and follow instructions as detailed in the Action Request Response (ARR).
- (Add New) 1.5.1. During the initial years of the F-35's fielding, and the government's use of contractor logistics support and performance based contracts, the ASC and PSC will have greater roles than is typical of a contractor and will be responsible for providing the labor to perform both organizational and depot level modifications. Modification schedules will be coordinated with the user communities to balance operational requirements, batching strategies and program requirements.
- (Replace Existing) 2.1.1. The Operating Unit/Squadron are required to report mishaps/accidents

in accordance with existing Service procedures and instructions and are also responsible for contacting the ALGS Ops Center in accordance with the F-35 Mishap Communication Instruction. Operating Unit/Squadron policy will determine individuals or positions that will notify the ALGS Ops Center in the event of a mishap/accident. SOI 1505.01.

(Replace Existing) 3.1.9. Wing Aircraft Structural Integrity Program (ASIP) and the Individual Aircraft Tracking (IAT) portion of ASIP are an integrated function within the ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/IAT data collection or reporting of quarterly data to the MAJCOM at this time. The MXG/CC will appoint a project officer for ASIP functions when required per the program master plan. (See AFI 21-101, Paragraph 3.4.1.53)

(Add New) 3.1.13. Establish and maintain an effective Low Observables (LO) maintenance program.

(Add New) 3.1.13.1. Work closely with the OG/CC to balance flying requirements with maintenance capability to minimize LO backlog.

(Add New) 3.1.13.2. Ensure all maintenance personnel complete annual LO awareness, panel handling training through the MTF.

(Add New) 3.1.13.3. Approval authority for flying aircraft in Aero Only configuration; aircraft in Aero Only configuration are limited to 3 flights and/or 7 calendar days before LO compliant repairs are required.

(Add New) 3.1.13.4. Appoint fully qualified/experienced LO technicians to QA.

(Add New) 3.1.14. Ensure on ground lightning protection is utilized for aircraft parked on an open ramp to mitigate or accept risk associated with aircraft lightning strikes when potential for adverse weather conditions are expected.

(Add New) 3.4.4. Ensure that all accessible EEL information is complete and accurate. Where errors are identified they are to be addressed by using the sync with EEL function, or via the Problem Reporting and Resolution and AR process. SOI 1505.07.

(Add New) 3.5.3. To fully ascertain the Mission Capability of an aircraft the user must utilize the screens and functionality in both SHM and CMMS to inform their decision. This will include comparing the SHM as displayed capability with any open or deferred Work Orders to establish an overall capability assessment for any given mission type.

(Replace Existing) 4.1.1.1. Track aircraft Low Observable (LO) status (See AFI 21-101, Paragraph 4.6.8.1)

(Add New) 4.2.3. After an Aircraft Return Action (ARA) the PMD is to be removed and transported to the GDR for PHM data download. This activity can be carried out by the aircrew or ground crew. SOI 1505.26.

(Add New) 4.2.4. Ensure proper generation/execution of manual Health Reporting Codes (HRCs) resulting from AV exceedences. SOI 1513.04

(Add New) 4.2.5. PHM Data Download. SOI 1513.05.

(Add New) 4.2.5.1. The PMD will be downloaded after every flight or ground run and uploaded into ALIS in order for the life usage data to be updated, the HRCs to be processed for WO creation, and maintenance to be undertaken as required. Exception: For the situations listed below:

(Add New) 4.2.5.1.2. Back-to-back missions that were pre-scheduled in ALIS and where the engine was not shut down only.

(Add New) 4.2.5.1.4. Per Aircraft Release Authority's decision where ALIS is not available (away from the AV host SOU) for a prompt processing of the PMD download.

(Add New) 4.2.6. Propulsion PHM Data Collection will be accomplished. SOI 1513.06.

(Replace Existing) 4.3.1. Aircraft Sections will perform propulsion tasks to include Engine Equipment Maintenance Section responsibilities.

(Add New) 4.4.1.1.1 Provide the WWM monthly status on authorized/on-hand quantities and serviceability of AME/NIE/WRM, critical armament testers, and support equipment by the first of each month, for the previous month.

(Add New) 4.4.2. AME Management. SOI 1516.01

(Add New) 4.4.2.1. The Operating Unit/Squadron will designate personnel responsible for receipt/turn in, acceptance, storage, usage tracking, aircraft configuration and management of AME items using ALIS CMMS in support of F-35 aircraft daily operations.

(Add New) 4.4.2.2. The Operating Unit/Squadron will ensure all automatically or manually populated AME data in ALIS is reviewed for accuracy.

(Add New) 4.4.2.3. The Operating Unit/Squadron will ensure all on and off aircraft required AME life tracking/usage parameter(s) are correctly annotated and reviewed for accuracy.

(Add New) 4.4.2.3.1. AME Storage Designation: The physical storage location is virtually designated and annotated in Computerized Maintenance Management System (CMMS). If a final virtual off-aircraft AME designation has not been established, contact your local ALIS administrator.

(Add New) 4.4.2.3.2. Establish and monitor gun room security and explosive licenses if required. (See AFI 21-101, Paragraph 5.7.3.3)

(Add New) 4.4.2.3.3. Alternate Mission Equipment (AME) section (If formed). This section accounts for, stores, controls, unpacks and packs AME, in coordination with the AMU weapons section NCOIC and WWM. (See AFI 21-101, Paragraph 5.7.5)

(Add New) 4.4.2.3.4. Develop and implement a program for documenting issue and receipt of in-use AME. (AFI 21-101 5.7.5.1)

(Add New) 4.4.2.3.5. Maintain the ALIS for installed guns, gun systems, and gun component TCIs or inspection data, based on round count limits listed in the PAIR JTD Data Module, including updating rounds from the AF IMT 2434 or locally developed form. (See AFI 21-101, Paragraph 5.7.4.11)

(Add New) 4.4.2.3.6. Ensure equipment is routed to Structural Maintenance for corrosion prevention and control as required IAW TO 1-1-8, TO 35-1-3, Lead Command instructions, and MDS-specific TOs. (See AFI 21-101, Paragraph 5.7.3.15)

(Add New) 4.4.2.3.7. Supply receives due-in AME items, performs an induction process per SCM Instructions and loads the AME items into the ALIS Standard Operating Unit (SOU).

(Add New) 4.4.2.3.8. AME Operating Unit/Squadron Acceptance: Supply notifies (not automated) the receiving Operating Unit/Squadron that a due-in AME item has been delivered and is ready for pickup, or per local SCM policies. SOI 1516.01.

(Add New) 4.4.2.3.9. Receiving Initial/New AME: When the gaining Operating Unit/Squadron receives AME they shall access CMMS and establish a life limited TUR per the PAIR as listed in JTD A13-10 tables. Using the tools within CMMS, populate the TUR with the required life limited tracking data/usage parameters. Once established, the aircraft AME usage must be manually entered into CMMS.

(Add New) 4.4.2.3.10. The serviceable AME item requires a serviceable condition tag which contains part and serial number, condition and current usage data. The AME item physically becomes the property of the gaining Work Center/assigned squadron and resides in their AME Storage facility.

#### (Add New) **4.7. Specialist Section**

(Add New) 4.7.1. Specialist Section will perform Electro Environmental tasks. (See AFI 21-101, Paragraph 4.9.7)

(Add New) 4.7.2. OG personnel perform re-programming actions via OMS/PMD. (See AFI 21-101, Paragraph 4.9.2.1.)

(Add New) 4.7.3. Perform IFF checkouts when prescribed per JTD. (See AFI 21-101, Paragraph 4.9.2.3)

(Replace Existing) 5.6.2. The Flight CC/Chief will report fleet LO mission capable status to ACC/A5FO on a daily basis. Fleet Low Observable Health Assessment System (LOHAS) average reported must not include non-possessed aircraft.

(Add New) 5.6.3. Low Observable Aircraft Structural Maintenance Section.

(Add New) 5.6.3.1. Manage all aspects of LOHAS for assigned aircraft; Low Observable Defect Entry Module (LODEM), Signature Assessment Module (SAM) and LO Maintenance Management Module (LOMMM).

(Add New) 5.6.3.2. Monitor fleet LOHAS margin used values and ensure aircraft are scheduled for LO margin reduction when individual aircraft LOHAS values reaches 80% margin used.

(Add New) 5.6.3.3. Coordinate with AMU Supervision, Production Superintendent and AMU PS&D to schedule aircraft downtime for LO margin reduction at the appropriate time based on overall fleet health and/or LOMMM damage priority screen.

(Add New) 5.6.3.4. Establish a Post Operations Service (POS) final finish team rotation plan to ensure all LO personnel remain proficient. Final finish POS inspections are required at the end of each flying day.

(Replace Existing) 5.7.1. Propulsion Flight responsibilities to include Engine Equipment Maintenance Section responsibilities are performed by Aircraft Section due to the F-35 maintenance concept. (See AFI 21-101, Paragraph 5.12)

### (Add New) **5.9.** Armament Flight

(Add New) 5.9.1. Armament Flight responsibilities are accomplished through the AMU Weapons Section . (See AFI 21-101, Paragraph 5.7)

(Replace Existing) 6.1.1.2. Use the ALIS to manage ICAO codes for on/off-station possessed aircraft. Since the capability doesn't exist for utilization of Purpose Identifier Codes in ALIS, F-35 units will need to submit their changes to their MAJCOM AVDO. (See AFI 21-101, Paragraph 6.2.1.8)

(Replace Existing) 6.1.3.6. PS&D will be the POC for TCTD, Production Aircraft Inspection Requirements (PAIRs), and aircraft equipment transfer. (See AFI 21-101, Paragraph 6.2.6.16.5.2)

(Replace Existing) 7.1.1. Electronic Equipment Logs (EELs) are embedded in ALIS and replace legacy AFTO Form 95. (See AFI 21-101, Paragraph 7.1)

(Replace Existing) 7.1.2. The intent of suspense validation is an embedded function within the ALIS. PS&D will continue to monitor due dates to ensure accuracy. (See AFI 21-101, Paragraph 7.1.6)

(Replace Existing) 7.1.3. The use of MSAT is not required. (See AFI 21-101, Paragraph 7.1.6)

(Add New) 7.2.4.1. Units are responsible for accurate reporting of AV configuration in the ALIS.

(Add New) 7.2.4.2. Units will create a WO for mis-configured items.

(Add New) 7.2.6. Jacket file will include DD250, Doc review checklist, Depot package, exceedance management. All other documentation is available through the ALIS.

(Add New) 7.2.7.1. For Remaining Life Estimate (RLE)/ Time to Maintenance (TTM), red is displayed upon the end of life or time limit reached and extensions can only be granted via the AR process or MAJCOM policy. Upon reaching the end of life or time limit, a HRC will automatically be generated for that event. SOI 1505.19.

(Add New) 7.2.8. Management of Scheduled and Prognostic Maintenance. SOI 1505.19.

(Add New) 7.2.8.1. Management of all AV Scheduled and Prognostic Maintenance requirements will be carried out within ALIS via Squadron Health Management (SHM). Propulsion System (PS) Scheduled and Prognostic Maintenance will be managed, by P&W.

(Add New) 7.2.8.2. Scheduled Maintenance Inspections:

(Add New) 7.2.8.2.1. Scheduled maintenance inspections will be tracked in SHM.

(Add New) 7.2.8.2.2. Only authorized individuals, in line with MAJCOM policy, will perform HIT creation.

(Add New) 7.2.8.3. Production Aircraft Inspection Requirements (PAIRs). SOI 1505.19.

(Add New) 7.2.8.3.1. PAIRs are those inspections driven by an approved Major Variance Request against a specific PN/SN. Each PAIR is applicable to specific TVEs as detailed in JTD. Specific details about the PAIR and work requirements will be detailed within JTD. These will also be visible within SHM.

(Add New) 7.2.8.3.1.2. PAIRs will be managed at the Operating Unit/Squadron level until they are rescinded by either a TCTD or attrition. Operating Unit/Squadron level personnel will verify the validity/applicability of PAIR inspection requirements against the directing JTD, the individual AV As Maintained (CMMS) records and recent configuration changes. Operating Unit/Squadron level personnel will need to close the HIT in SHM if a tracked item is replaced.

(Add New) 7.2.8.3.1.3. Using the Maintenance History BIRT report from CMMS can provide a listing of configuration changes to use when validating the PAIRs/HIT applicability.

(Add New) 7.2.8.4. Specific inspection requirements can be input into SHM by using the HIT tool, buy using a SSI or by adding it to a Task Template. If the requirement is linked to a Flight

Servicing requirement (BOS, IOS or POS) then a Supplemental Servicing Inspection (SSI) will be used or created. A Task Template for the inspection and adding it to the Related Tasks field of the flight servicing Task Template.

(Add New) 7.2.8.5. Scheduled or Prognostic maintenance inspection requirements that require depot level support will require the initiation of an AR.

(Add New) 7.2.8.6. Authorization to deviate, along with any applicable latitudes, from Scheduled/Prognostic maintenance requirements will be granted via the AR process. Any MAJCOM specific requirements for authorizations, permissions and processes to gain a deviation remains; this instruction provides the process for F-35 engineering disposition.

(Add New) 7.2.8.7. Deferring Scheduled and/or Prognostic Maintenance can be carried out only after the inspection requirement has been pushed from SHM to CMMS as a Work Order.

(Add New) 7.2.8.8. If an AR Response directs an inspection requirement, the HIT tool will be used to initiate these requirements.

(Add New) 7.2.8.9. If there is a requirement to adjust or correct usage on an aircraft or part, the Advanced Utilities Tool can be utilized by an authorized person to make the necessary changes.

(Add New) 7.2.9. Depot Induction. SOI 1505.12.

(Add New) 7.2.9.1. Operating Unit/Squadron will prepare aircraft and equipment for entry to depot level work efforts.

(Add New) 7.2.9.2. Operating Unit/Squadron will participate in the Pre and Post Dock Meet Me Call meetings for their respective aircraft. Pre-dock will be held no later than 30 days prior to aircraft induction into depot. Pre-dock/induction meeting will have, as a minimum, the Baseline Scheduled Work Package (SWP) and the F-35 Maintenance Request Form. Aircraft configuration required for depot induction will be discussed during Pre-dock/induction meeting. A Post-dock meeting will be held no later than 10 days prior to scheduled aircraft completion.

(Add New) 7.2.9.3. Operating Unit/Squadron will report unsatisfactory receipt, at either the squadron or depot level, through the Depot Feedback Questionnaire. Submit an AR as required.

(Add New) 7.2.9.4. Additional work requests (Unit Level TCTDs), One Time Inspections (OTIs), Delayed Discrepancies, Production Aircraft Inspection Requirements (PAIRs) will be annotated on a Maintenance Request Form submitted to the F-35 JPO no later than 60 days prior to aircraft induction for consideration. The F-35 JPO will notify requesting unit of what work will be approved and included in the depot work package.

(Add New) 7.2.9.5. The procedure to electronically transfer the ALIS portion of an asset's records will be accomplished utilizing CMMS to write the data to electronic media.

(Add New) 7.2.9.6. Non-ALIS portion of an asset's records will be transferred by electronic media.

(Add New) 7.2.9.7. When directed to transfer an asset, the originating unit will input all current state data associated with a Health Inspection Task (HIT) for the AV to a Deferred Work Order.

(Add New) 7.2.9.8. Following transfer within ALIS, the records will be transferred in line with existing Service policy for exporting electronic media:

(Add New) 7.2.9.8.1. Automated Weight and Balance System

(Add New) 7.2.9.8.2. Exceedance Management System

(Add New) 7.2.9.8.3. Propulsion System Records

(Add New) 7.2.9.8.4. Joint Oil Analysis Program Records

(Add New) 7.2.9.9. CMMS will cancel all requisitions in the "New" or "Released" state after the initiation of an asset transfer. The losing and gaining unit will coordinate to ensure necessary demands are transferred.

(Add New) 7.2.9.10. The losing Operating Unit/Squadron will ensure all requisition details are included in any paused WO, deferred WO or Follow on Maintenance Requirement prior to asset transfer.

(Add New) 7.2.9.11. The losing Operating Unit/Squadron will inform local SCM administrator/user of any outstanding requisitions that must be transferred/redirected to the gaining Operating Unit/Squadron. Transferral or redirection of open requisitions is a SCM responsibility.

(Add New) 7.2.9.12. The receiving unit will ensure that all necessary requisitions are visible and accurate on the gaining unit's SOU. If problems or anomalies occur, an AR is to be initiated for resolution.

(Add New) 7.2.9.13. The receiving Operating Unit/Squadron will create HIT requirements for the asset identified on the deferred Work Order using the current state data included.

(Add New) 7.2.9.14. The gaining Operating Unit/Squadron will notify the losing unit to initiate the deletion of the AV from their SOU after the gaining unit has loaded and verified the data.

(Add New) 7.4.1. The asset transfer approval process and coordination between losing and gaining units required prior to, during and after an Asset transfer will be carried out in line with MAJCOM policy and is to include coordination on any outstanding supply demands.

(Add New) 7.4.2. Any problems including lost or corrupt data will be dealt with by the Action Request process.

- (Add New) 7.4.3.1. Coordinate on all AR submissions for AFI 21-103 reporting.
- (Add New) 8.4.1. Maintain and utilize the SEMM in the same manner as an AF Technical Order. Follow procedures outlined within T.O. 00-5-1, AF Technical Order System to the fullest extent possible. Address any deficiency or gaps with the SEMM through the established AR process.
- (Add New) 8.6.2. The physical accomplishment of an F-35 weight and balance is currently a depot level task, requiring only the management and control of the Weight and Balance handbook and applicable updates required by unit level personnel.
- (Add New) 8.6.3. Transfer of Air Vehicle Weight Balance records.
- (Add New) 8.6.3.1. The transferring of data files between the ALIS work station and the GFE laptop/work station hosting the AWBS software is carried out in accordance with Service electronic media transfer policy to ensure safe and secure transfer of data. Data transfer devices will comply with Service policies and regulations. This can include TCTD mod packages, ZFMP ADL and Form F records.
- (Add New) 9.1.2. For parts that are removed as a part of an investigation, mishap or accident the following applies:
- (Add New) 9.1.2.1. For Support Equipment (SE), use the process of locking down the asset and do not turn in the part to supply until authorized to do so in accordance with MAJCOM policy.
- (Add New) 9.1.2.2. For parts orderable within ALIS, the part will be quarantined in line with MAJCOM policy.
- (Add New) 9.1.3. Releasing a part from Quarantine:
- (Add New) 9.1.3.1. Items are to be released from Quarantine only when authorized to do so by an appropriate authority, as defined by MAJCOM policy.
- (Add New) 10.1.1. Support personnel will requisition a new tool in ALIS. Ensure replacement tools received are appropriately marked.
- (Add New) 10.1.1.1. Common Hand Tools and Tool Containers procured under emergency conditions may be delivered unmarked. In those cases, the receiving unit shall locally etch the replacement tool or container with the same Tool ID number as the broken or lost tool/container it is replacing.
- (Add New) 10.1.2. If a tool is found, personnel can find the tool owner by comparing the sequence number to the Tool Marking Organizational Matrix or reference SOI 1508.06 for additional contact information

- (Add New) 10.1.3. Missing hand tools discovered prior to completing a workpackage will be entered into CMMS. Additionally, a separate work order will be created for missing tool. (See AFI 21-101, 10.8.1.2.)
- (Add New) **10.2 Support Equipment Maintenance Matrix (SEMM)**. The primary source for technical data used by authorized personnel to conduct maintenance for SE is verified JTD. For detailed information on the SEMM see paragraph 1.4.3. SOI 1508.09.
- (Add New) 10.3.1. All locally manufactured, developed, or modified tools used on program provided equipment or aerospace vehicle will be submitted through an AR for approval. (See AFI 21-101, Paragraph 10.6)
- (Replace Existing) **11.1. Ordering Parts.** Aircraft parts are ordered from JSF Supply warehouse through CMMS/IFS interface. SOI 1505.29. (See AFI 21-101, Paragraph 11.4)
- (Add New) 11.1.1. The process outlined in this instruction is applicable to only those parts that can/will be ordered using ALIS. Any requisitions outside of ALIS, using either legacy or other processes/systems, will be left to Service policy to detail, manage and control.
- (Add New) 11.1.2. Ordering and turn in of Government Furnished Equipment/Government Furnished Material (GFE/GFM) parts will be done using the legacy system in line with Service policy.
- (Add New) 11.1.3. For Propulsion System parts, ordering will be carried out using the PSC Workstation.
- (Add New) 11.1.4. Classified and Controlled parts will be marked in accordance with Service policy for classified asset markings.
- (Add New) 11.1.5. Parts ordering for On-Equipment maintenance:
- (Add New) 11. 1.5.1. Parts ordering for On-Equipment maintenance is carried out to support the WO execution phase. Note: GFE/GFM parts ordering for On-Equipment maintenance will not be selectable for ordering within the Computerized Maintenance Management System (CMMS) application, consult the local supply specialist for ordering details.
- (Add New) 11.1.6. Parts ordering for consumables/Pre-Expended Bin (PEB).
- (Add New) 11.1.6.1. Parts ordering for consumables and PEB are carried out to support the Work Order (WO) execution for replacement of minor hardware and consumable items. Note: Ordering GFE/GFM through CMMS cannot be accomplished. Consult the local supply specialist for ordering details.
- (Add New) 11.1.7. Parts ordering in support of Off-Equipment maintenance:

(Add New) 11.1.7.1. The process of ordering parts/subassemblies for parts at an Off-Equipment work center are detailed in SOI 1505.29. Note: Ordering GFE/GFM through CMMS cannot be accomplished. consult the local supply specialist for ordering details.

(Replace Existing) 11.4. Delete

(Add New) 11.7.1. Source of Repair Identification. SOI 1505.30.

(Add New) 11.7.1.1. Upon part turn-in, the local supply specialist will be notified by ALIS SCM as to whether the part can be repaired locally or requires shipment to an Original Equipment Manufacturer (OEM)/Depot.

(Add New) 11.7.1.2. Routing of the part to OEM/Depot will be carried out using the details provided for shipment by SCM.

(Add New) 11.7.1.3. Routing of part to an O+ maintenance work center.

(Add New) 11.7.1.3.1. Identification of the O+ (off-equipment) maintenance work center is carried out by the local supply specialist based on local/unit level capabilities.

(Add New) 11.7.1. Parts Turn-In. SOI 1505.29.

(Add New) 11.7.1.1. The part turn-in process is the same regardless of On- or Off-Equipment maintenance tasks.

(Add New) 11.7.1.2. The parts turn in process is carried out for each repairable item that is identified by Supply Chain Management (SCM) as requiring turn in. For those parts that generate a "Due In" status in CMMS/SCM, the details for each part will be listed on the "Due In List" in.

(Add New) 11.7.1.3. For parts that require quarantine in support of investigations or exhibit management, follow the part turn-in process detailed in SOI 1505.29, Attachment 7.

(Add New) 11.7.1.4. Turn-in of GFE/GFM parts will be done in line with Service policy and procedures outside of ALIS.

(Add New) 11.7.2. Requisition Management and Reporting:

(Add New) 11.7.2.1. CMMS material requisition listing:

(Add New) 11.7.2.1.1. CMMS provides a searchable view of requisitions from the Material Requisition Page. From this page an authorized user can edit, receive, turn in and adjust requisitions on the SOU.

(Add New) 11.7.2.1.2. CMMS Built In Reporting Tool (BIRT) reports are available from the Material Requisition Page and provide detailed listings of requisitions, PEB and other supply process related information.

(Add New) 11.7.3. Due-In List Page:

(Add New) 11.7.3.1. The Due-In list allows users to view and manage parts that are awaiting turn-in from maintenance.

(Add New) 11.7.4. CMMS Order Cancellation

(Add New) 11.7.4.1. Order cancellation can be accomplished from the Material Request Details Page and only on requisitions in the state of New, Released, or Picked. This is a permission-based function within CMMS and control of this function is left to the Operating Unit/Squadron to authorize in line with Service policy. Note; Order cancellation must be done prior to Work Order Cancellation.

(Add New) **11.15. Hazmat.** SOI 1509.01.

(Add New) 11.15.1. Operating unit/squadron will submit requisitions for F-35 unique HAZMAT via ALIS CMMS to SCM. The Retail Supply Warehouse will notify the Local HAZMAT facility of incoming requisitions to be filled.

(Add New) 11.15.2. Common HAZMAT requisitions will be processed using legacy management information systems (MIS) in accordance with established policies and procedures.

(Add New) 11.15.3. Issue to Maintenance:

(Add New) 11.15.3.1. It is the responsibility of the Local HAZMAT facility (either at the Retail Warehouse or Local HAZMAT facility, dependant on local policy) to communicate to the Retail Supply Warehouse that F-35 HAZMAT material has been issued to a maintenance organization. Authorized personnel will track material issues and adjust the inventory levels for F-35 unique HAZMAT in ALIS SCM. The Local HAZMAT facility and the Retail Supply Warehouse will determine how they will coordinate the information when HAZMAT materials are issued (e.g. MOA). ALIS SCM automatically notifies the ASC Item Analyst who will forecast and analyze replenish needs.

(Add New) 11.15.4. Reconciliation Process:

(Add New) 11.15.4.1. A process for inventory reconciliation between the Retail Supply Warehouse and the Local HAZMAT facility shall be described in a formal document (e.g., Memorandum of Agreement).

(Add New) 12.1.2. Ensure JPO provides CTKs IAW production contract guidelines. (See AFI 21-101, Paragraph 12.1.11)

(Replace Existing) 14.1.1. IAT portion of ASIP is an integrated function within the ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/IAT data collection or reporting of quarterly data to the MAJCOM at this time. The MXG/CC will appoint a project officer for ASIP functions when required per the program master plan. (See AFI 21-101, Paragraph 14.6.1)

(Replace Existing) 14.6.1. For suspected material failure utilize an AR IAW paragraph 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 14.19.5.1.1 and 14.19.5.2.3)

(Add New) **14.10. Aircraft Grounding.** SOI 1501.01, 1514.05 (will supersede 1501.01). (See AFI 21-101, Paragraph 14.3)

(Add New) **14.11. Documenting Maintenance.** SOI 1505.17.

(Add New) 14.11.1. F-35 maintenance documentation will be carried out on a Work Order in the CMMS application in ALIS, from either a Portable Maintenance Aid (PMA) or from an ALIS connected work station.

#### Abbreviations and Acronyms (Added)

(Add New) **ADL**—Aircraft Data Load

(Add New) **AERO**—Aeronautics

(Add New) **AME**—Alternate Mission Equipment

(Add New) **ARA**—Aircraft Return Action

(Add New) **ASIP**—Aircraft Structural Integrity Program

(Add New) **AV**—Air Vehicle

(Add New) **AVDO**—Aerospace Vehicle Distribution Officer

(Add New) **AWBS**—Automated Weight and Balance System

(Add New) **BIRT**—Built In Reporting Tool

(Add New) **BOS**—Before Operations Servicing

(Add New) **CTK**—Composite Tool Kit

(Add New) **EEL**—Electronic Equipment Log

(Add New) **GFE**—Government Furnished Equipment

(Add New) **GFM**—Government Furnished Material

(Add New) **GMT**—Greenwich Mean Time

(Add New) **HAZMAT**—Hazardous Material

(Add New) **HIT**—Health Inspection Task

(Add New) **HRC**—Health Reporting Code

(Add New) **IAT**—Individual Aircraft Tracking

(Add New) IFF—Identify Friend or Foe

(Add New) **IFS**—Industrial and Financial System

(Add New) **IOS**—Interim Operational Servicing

(Add New) **JPO**—Joint Program Office

(Add New) **JSF**—Joint Strike Fighter

(Add New) **JTD**—Joint Tech Data

(Add New) **LSC**—Loading Standardization Crew

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(Add New) LO—Low Observables
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- (Add New) **LODEM**—Low Observable Defect Entry Module
- (Add New) **LOHAS**—Low Observable Health Assessment System
- (Add New) **LOMMM**—LO Maintenance Management Module
- (Add New) MDS—Mission Design Series
- (Add New) MIS—Maintenance Information System
- (Add New) **MSAT**—Maintenance Scheduling Application Tool
- (Add New) **NCOIC**—Non-Commissioned Officer In Charge
- (Add New) **NIE**—Normally Installed Equipment
- (Add New) **O&M**—Operation & Maintenance
- (Add New) **OEM**—Original Equipment Manufacturer
- (Add New) **OG**—Operations Group
- (Add New) **OMS**—Off Board Mission Support
- (Add New) **P&W**—Pratt and Whitney
- (Add New) PAIR—Production Aircraft Inspection Requirement
- (Add New) **PEB**—Pre-Expended Bin
- (Add New) **PHM**—Prognostics and Health Management
- (Add New) **PMD**—Portable Maintenance Device
- (Add New) **PN/SN**—Part Number/Serial Number
- (Add New) POS—Post Operations Service
- (Add New) **PS**—Propulsion System
- (Add New) **PS&D**—Plans Scheduling and Documentation
- (Add New) **PSC**—Propulsion System Contractor
- (Add New) **PSI**—Product Support Integrator
- (Add New) **QA**—Quality Assurance
- (Add New) **RLE**—Remaining Life Estimate
- (Add New) **SAM**—Signature Assessment Module
- (Add New) **SE**—Support Equipment
- (Add New) **SEMM**—Support Equipment Maintenance Matrix
- (Add New) **SCM**—Supply Chain Management
- (Add New) **SHM**—Squadron Health Management
- (Add New) **SOU**—Standard Operating Unit
- (Add New) **SSI**—Supplemental Servicing Inspection
- (Add New) **SWP**—Scheduled Work Package
- (Add New) **TO**—Technical Order
- (Add New) **TTM**—Time to Maintenance
- (Add New) **TUR**—Track Usage Record
- (Add New) **TVE**—Type Variant Effectivity
- (Add New) **UAI**—Unique Aircraft Identifier
- (Add New) **VIN**—Vehicle Identification Number
- (Add New) **WO**—Work Order
- (Add New) **WRM**—War Reserve Material
- (Add New) **WWM**—Wing Weapons Manager
- (Add New) **ZFMP**—Zero Fuel Mass Properties

#### **Attachment 5 (Added)**

### AIR FORCE F-35 FIN (TAIL#) POSSESSION REPORTING PROCEDURES

- A5.1. BLUF: Fin number can be used to designate F-35 assignment/possession.
- A5.2. AFI 21-103 currently dictates assignment/possession reporting requirements for assets at the base, depot, MAJCOM, and HQ AFMC levels. Within the current construct, the F-35 JSF program does not provide information to facilitate this requirement. According to AFI 21-103, the possessing organization is required to report the hours they possess an aerospace vehicle, changes in an aerospace vehicles assignment/possession, status conditions that affect an aerospace vehicle's ability to perform assigned mission, flying hours, and sorties. This document is a proposal for F-35 specific aircraft identifiers that assist Air Force personnel in accomplishing the required reporting. The F-35 community will call for Aerospace Vehicle Distribution Officers (AVDOs) to operate under different business practices than in legacy systems, though their main role will remain the same. The AVDO will remain the primary POC for any aircraft assignment/possession reporting within their organization. The ALIS administrators will make changes to FIN field in ALIS based on input from the AVDO.
- A5.3. There are three data elements associated with identifying aircraft in ALIS:
- A5.3.1. Unique Aircraft Identifier (UAI): 40 Character field. Lockheed Martin designated unique identifier also known as the specific Type Variant Effectivity (TVE) as defined in JSF Program Directive 30. This number never changes for an aircraft. This is like the VIN for a car; it will never change for the life of the aircraft.
- A5.3.2. Bureau Number: 10 Character field. Unique ID reserved and assigned per aircraft at time of ordering, and is the identifier used by the service. This number never changes for an aircraft. It is comparable to a legacy aircraft's serial number which is assigned during the acquisition process.
- A5.3.3. Fin Number: 40 Character field. Identifier assigned by a squadron to an aircraft. This number can change for an aircraft as it is reassigned from squadron to squadron or as a squadron sees fit. This is similar to a legacy aircraft tail number. There are no program requirements that dictate how the fin number is assigned.
- A5.4. AVDO transactions with the F-35 are best accomplished by modifying the fin number field in the aircraft records. In the AF fin number, we will reserve 30 of the 40 available characters. When assigning a fin number units would include the following information:



- A5.4.1. Date/Time stamp: 9 character date/time indicator
- A5.4.1.1. Date/time that the new fin number is applicable.

- A5.4.1.2. 5 character date in Julian format
- A5.4.1.3. 4 character time (GMT)
- A5.4.2. Change indicator: 1 character indicator
- A5.4.2.1. N new transaction; No need to over-write previous data
- A5.4.2.2. D Delete the matching transaction; the system will delete the "N" transaction that matches the entry in this transaction. A follow-on transaction with a CI of "N" will provide the correct information.
- A5.4.3. Assigned Command: 2 character command code as identified in attachment 2
- A5.4.4. Assigned Unit: 9 character unit as identified on the DD form 250
- A5.4.4.1. 4 character number (i.e. 0033)
- A5.4.4.2. 3 character kind (i.e. FTR)
- A5.4.4.3. 2 character type (i.e. WG)
- A5.4.5. Possession Code (Purpose Identifier Code): 2 character identifier as identified in Attachment 1 and prescribed in AFI 21-103 attachment 17 (dated 9 April 10).
- A5.4.6. Last 7 of UAI: 7 characters of the UAI. This part of the fin number should never change so that all other information can be referenced back to the same aircraft.
- A5.5. Just as AF AVDOs currently have procedures when processing a change in a weapon system's possession, the JSF community would need guidance. Sample AVDO responsibilities could include (but are not limited to) the following steps:
- A5.5.1. Primary and alternate AVDO appointed by WG/GP CC. Notification of appointment made to the appropriate MAJCOM AVDO.
- A5.5.2. Monitor MIS daily to ensure proper assignment/possession data is reported.
- A5.5.3. Initiate modification to the fin number when the assignment/possession changes.
- A5.5.4. Initiate correction to the fin number and historical data when corrupt assignment/possession data is discovered.
- A5.5.4.1. Assignment/possession data error correcting needs attention. There are times that "backing out" data will be necessary. Our information system needs to facilitate this

requirement. An AVDO at either base or MAJCOM level needs to have authority to facilitate changes to possession in the data warehouse.

- A5.5.5. Notify the ALIS administrators of change in fin number to ensure IER with updated information is transmitted to the data warehouse.
- A5.5.6. Send required messages to the Lead Commands as prescribed in AFI 21-103 2.5.2.6.
- A5.6. Input of the fin number assignment must be limited to the appointed AVDO to ensure integrity of the data warehouse.
- A5.7. OPR for any issues adhering to this guidance (including but not limited to clarification of policy, technical issues, ALIS administrator support issues) is ACC/A4QJ at DSN 574-4810.

## **Attachment 6 (Added)**

### **APPROVED SOIs**

Table A6.1. Approved SOIs.

SOI#	SOI Title	SOI#	SOI Title
1504.01	Daily Operational Flight Scheduling	1505.23	Functional Check Flights
1505.01	Actions Following Aircraft Mishap/Accident	1505.26	Sortie Generation Cycle
1505.02	Flight Servicing	1505.27	Asset Records Management
1505.03	Quality Assurance Inspections	1505.28	Quarantine of Parts
1505.04	LO Management	1505.29	Parts Ordering and Turn-In
1505.05	Management of PMA's	1505.30	Asset Item Repair Cycle
1505.06	O+ Maintenance	1507.01	Engine Ground Operations
1505.07	Electronic Equipment Log (EEL)	1507.02	QEC
1505.09	Asset Transfer Procedure	1508.02	SE Calibration
1505.12	Induction and Delivery of Aircraft to/from Depot Maintenance	1508.03	SE Status Reporting

1505.13	Mission Capability Assessment	1508.04	SE Proof Loading	
1505.14	Asset Lockdown Procedures	1508.05	SE Grey Color	
1505.15	Cannibalization Management	1508.06	Hand Tool and Container Marking	
1505.16	Deferred Maintenance	1511.01, IC- 1	Operation and Maintenance Data	
1505.17	Documenting Maintenance	1512.01	Flight Manual Product Set	
1505.18	Releasing an Aircraft for Flight	1513.01	Performance Monitoring	
1505.19	Management of Scheduled & Prognostic Maintenance	1513.02	Modifications/Retrofit (including scheduling)	
1505.20	Weight and Balance Management	1513.06	Propulsion Health Management and Reporting	
1514.01	Time Compliant Technical Directives (TCTD)	1514.04	Lightning Support Team	
1514.02, IC-1	Problem Reporting and Resolution (PRR)	1515.01	Software Reciept and Acceptance	
1514.03	Serious Fault Notification	1515.02	AV Software Load Troubleshooting	

# BY ORDER OF THE COMMANDER AIR COMBAT COMMAND



Supplement

ADDENDUM B

10 OCTOBER 2012

Maintenance

CAF: AIRCRAFT AND EQUIPMENT MAINTENANCE MANAGEMENT (F-35)

# COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This addendum implements AFI 21-101\_CAFSUP, AIRCRAFT AND EQUIPMENT MAINTENANCE MANAGEMENT. This supplement prescribes policies and procedures governing aerospace equipment maintenance management of F-35 aircraft for Air Combat Command (ACC). This addendum does not apply to the Air National Guard (ANG) or Air Force Reserve Command (AFRC); however, ANG/AFRC personnel assigned to Classic Associate Units supporting CAF units will comply with the guidance provided within this supplement. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual 33-363, Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <a href="https://www.my.af.mil/afrims/afrims/afrims/rims.cfm">https://www.my.af.mil/afrims/afrims/afrims/rims.cfm</a>. Contact supporting records managers as required. Send comments, questions, and suggested improvements to this publication on AF Form 847, Recommendation for Change of Publication, through channels to HQ ACC/A4QM, 130 Douglas Street, Suite 210, Langley AFB, VA 23665-2791.

#### **Chapter 1—MANAGEMENT PHILOSOPHY AND POLICY**

**5** 

1.1. Introduction ......

1.2.	Aircraft and Equipment Readiness	
1.3.	Maintenance Concept	
1.4.	Use of Joint Technical Directives (JTD)	
1.5.	Modification Management.	
Chapter 2—	SAFETY	
2.1.	General Safety Guidance	
Chapter 3—	GENERAL RESPONSIBILITIES FOR COMMANDERS AND KEY LEADERS	
3.1.	Maintenance Group Commander Responsibilities	
3.2.	Maintenance Operations Officer (MOO)/Maintenance Superintendent (MX SUPT) Responsibilities	
3.3.	Flight Commander/Flight Chief or AMU Officer in Charge (OIC)/Superintendent:	
3.4.	Section NCOIC/Chief	
3.5.	Production Superintendent (Pro Super)	
Chapter 4—	AIRCRAFT/HELICOPTER MAINTENANCE SQUADRON (AMXS/HMXS)	
4.1.	Flightline Expediter	
4.2.	Aircrew and Maintenance Debrief Section	
4.3.	Aircraft Section	
4.4.	Weapons Section	
4.5.	Weapons expediter	
4.6.	AMU Supply Support Element.	
Chapter 5—	MAINTENANCE SQUADRON (MXS)	
5.1.	MX Operations Officer(MOO)/MX SUPT Responsibilities	
5.2.	Specialist Support.	
5.3.	Accessories Flight	
5.4.	Aerospace Ground Equipment (AGE) Flight	
5.5.	Avionics Flight	
5.6.	Fabrication Flight	
5.7.	Propulsion Flight	
5.8.	Test, Measurement, and Diagnostic Equipment (TMDE) Flight	
Chapter 6—	MAINTENANCE OPERATIONS SQUADRON	
6.1.	Maintenance Operations Flight (MOF)	

Chapter 7–	-MAINTENANCE PLANS, SCHEDULING AND DOCUMENTATION (PS&D)
7.1.	General
7.2.	Manage the following programs for assigned aircraft and equipment using the following guidelines:
7.3.	Reference SOI 1505.
7.4.	Wing Aerospace Vehicle Distribution Officer (AVDO).
Chapter 8–	-QUALITY ASSURANCE (QA)
8.1.	Chief Inspector Responsibilities
8.2.	QA Product Improvement Programs (PIP)
8.3.	Configuration Management (CM) and Modification Management
8.4.	Technical Order Distribution Office (TODO).
8.5.	Functional Check Flights (FCFs) to include Operational Check Flights (OCFs)
8.6.	Weight and Balance (W&B) Program
Chapter 9–	-IMPOUNDMENT PROCEDURES
9.1.	Impoundment Process and Procedures
Chapter 10	—TOOL AND EQUIPMENT MANAGEMENT
10.1	Tool and Equipment Management.
Chapter 11	—MAINTENANCE SUPPLY SUPPORT
11.1	Ordering Parts.
11.2	2. MICAP Processing.
11.3	Bench Stock.
11.4	4. Time Compliance Technical Order (TCTO) Kit Procedures
11.5	5. Production Scheduling.
11.6	6. Repair Cycle Assets.
11.7	7. DIFM
11.8	Bench Check and Repair Policy.
11.9	D. Maintenance Turn-Around (TRN) Record Update Processing
11.1	0. Buildup Items.
11.1	1. Deficiency Report (DR) Exhibits.
11.1	2. Work Center Supply Management.
11.1	3. Maintenance Repair/Supply Delivery Priorities.
11.1	4. Intermediate Repair Enhancement Program (IREP).

Chapter 12—	-WING WEAPONS MANAGER AND WEAPONS STANDARDIZATION
12.1.	Wing Weapons Manager (WWM)
12.2.	Loading Standardization Crew (LSC)
Chapter 13—	-MOBILITY AIRCRAFT DEFENSIVE SYSTEMS LOADING POLICY
13.1.	General
Chapter 14—	-ADDITIONAL MAINTENANCE REQUIREMENTS AND PROGRAMS
14.1.	Aircraft Structural Integrity Program (ASIP)
14.2.	Cannibalization Program
14.3.	Crash Damaged or Disabled Aircraft Recovery (CDDAR) Program
14.4.	Dropped Object Prevention (DOP) Program
14.5.	Engine Run Training and Certification Program
14.6.	Foreign Object Damage (FOD) Prevention Program
14.7.	Hot Refueling Procedures
14.8.	Radar Warning Receiver (RWR)/Radar Threat Warning (RTHW) Testing
14.9.	Customer Relationship Management Program.
Chapter 15—	-MAINTAINING COMMERCIAL DERIVATIVE AIRCRAFT
15.1.	Background Information and Objective
Chapter 16—	-AIRCREW EGRESS SYSTEMS MAINTENANCE
16.1.	Egress Maintenance:
Attachment 1	—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION
Attachment 2	2—EXAMPLE AR ROUTING SCENARIOS
Attachment 3	3—AR TEMPLATE FOR SUBMITTAL
Attachment 4	LAR CONTINGENCY TEMPLATE FOR SURMITTAL

#### MANAGEMENT PHILOSOPHY AND POLICY

#### 1.1. Introduction

- 1.1.1. Sustainment Operating Instructions (SOIs) are F-35 joint program instructions provided by the Joint Program Office (JPO). They have been developed with Service/Partner participation and provide information on F-35 unique processes where legacy instructions may not be adequate for the given topic. SOIs provide source documentation for Air Force policies/instructions related to the F-35 and are referenced throughout this publication. SOI language that is applicable to AFI 21-101 has been extracted and inserted into applicable areas of this publication.
- 1.1.2. The F-35 Joint Strike Fighter Program was developed as a Performance Based Logistics (PBL) program. The strategy employs an integrated and affordable performance package that is designed to optimize system readiness and reduce the demand on the logistics tail of a system. It is intended to meet performance goals through a support structure based on long-term performance agreements with clear lines of authority and responsibility.
  - 1.1.2.1. A PBL concept provides a level of performance rather than managing and directing every aspect of the weapon system support. PBL moves the focus from the management of parts and suppliers to management of the suppliers responsible for delivering required performance. Many of the traditional / legacy aircraft requirements identified in AFI 21-101 may not apply to weapon systems purchased and managed IAW PBL standards.
- 1.1.3. The F-35 is a unique joint services platform that utilizes terminology that differs from legacy. For a frame of reference, the following are common terms and their legacy equivalent: ALIS=IMDS, JTD=MDS T.O., TCTD=TCTO, AR=AFTO -107 or ETAR, MEFL=MESL and LCN=WUC.

#### 1.2. Aircraft and Equipment Readiness

1.2.1. Management of all F-35 Air Vehicle (AV) Scheduled and Prognostic maintenance requirements are performed within the Autonomic Logistics Information System (ALIS). Scheduled and Prognostic maintenance is performed IAW Joint Technical Data (JTD), Time Compliance Technical Directive (TCTD) and as directed in an Action Request Response (ARR). Specific scheduled maintenance requirements are created by using the Health Inspection Task (HIT) in Squadron Health Management (SHM) via the ALIS. (See AFI 21-101, Paragraph 1.3)

#### 1.3. Maintenance Concept

1.3.1. Action Requests (AR) are the primary method of problem reporting for the F-35 Air System. Refer to paragraph 14.9 to submit ARs to the Autonomic Logistics Global Sustainment (ALGS) Operations Center through the ALIS. Additionally, the local OI shall include procedures for submitting ARs during periods when the ALIS has connectivity outages. SOI 1514.02. (See AFI 21-101, Paragraph 1.4.1)

## 1.4. Use of Joint Technical Directives (JTD)

- 1.4.1. Recommend improvements, corrections or additions to Joint Technical Data (JTD) by submitting a Joint Technical Data Action Request (JTDAR) to ALGS Operations Center through the ALIS for JTD improvements, corrections or additions. The request should be clear, concise and provide enough detail to identify the recommendation. Additionally, the request should provide a recommended solution if known. The initiator shall recommend a JTDAR processing priority of Routine or Expedited Action as applicable. (See AFI 21-101, Paragraph 1.6.2.1)
  - 1.4.1.1. Expedited Action changes to JTD are required when personnel/property hazards, safety-of-flight conditions exist or a change that pertains to a procedure that will result in a work stoppage or damage to equipment if left uncorrected.
  - 1.4.1.2. Routine Action changes to JTD are required for all other changes that do not meet the Expedited Action criteria.
- 1.4.2. Waivers, deviations, improvements, corrections, or additional technical data procedures are submitted using an AR to the ALGS Operations Center through the ALIS. SOI 1514.02. (See AFI 21-101, Paragraph 1.6.2.3)
- **1.5. Modification Management.** Submit an AR to ALGS Operations Center through the ALIS for program specific equipment and aircraft modifications. SOI 1514.02. (See AFI 21-101, Paragraph 1.11)

# **SAFETY**

# 2.1. General Safety Guidance

2.1.1. No additional guidance required for F-35 aircraft.

#### GENERAL RESPONSIBILITIES FOR COMMANDERS AND KEY LEADERS

# 3.1. Maintenance Group Commander Responsibilities

- 3.1.1. Ensure TOs are managed IAW TO 00-5-1 or the approved MDS process (e.g., JTD). SOI 1514.02 and 1511.01. (See AFI 21-101, Paragraph 3.4.1.15)
- 3.1.2. Provide maintenance cross-tell information IAW Chapter 8 of AFI 21-101 or by using the approved MDS process (e.g., Customer Relationship Management (CRM) application of the ALIS via an AR). SOI 1514.02. (See AFI 21-101, Paragraph 3.4.1.17)
- 3.1.3. For the F-35 Air System, Lockheed Martin (LM) Aeronautics (AERO) is the Joint-Service Technical data Manager (LM-JSTDM) and has management responsibility for all JSF program technical data and technical data requirements. LM-JTDM provides overall management of the JTDAR internal process and updates required for all JSF JTD. The Propulsion System Contractor (PSC) is responsible for all propulsion system JTD and manages PSC JTDARs in the same manner as LM-JTDM for updates on all PSC JTD. SOI 1511.01. (See AFI 21-101, Paragraph 3.4.1.18)
- 3.1.4. Manage Minimum Equipment Levels (MELs) for essential maintenance assets to include aircraft, engines, pods, AGE, vehicles, etc., using the approve MDS/MIS process (e.g., Lightning Support Team (LST) as determined by PBL standards). (See AFI 21-101, Paragraph 3.4.1.22)
- 3.1.5. Intermediate Repair Enhancement Program (IREP). Supply chain management functions are regulated through PBL. (See AFI 21-101, Paragraph 3.4.1.23)
- 3.1.6. Engine trending data is managed by Pratt & Whitney service engineers according to PBL standards. (See AFI 21-101, Paragraph 3.4.1.28)
- 3.1.7. Under the PBL contract; Stock Record Account Number (SRAN) engine manager duties are performed by the contractor. (See AFI 21-101, Paragraph 3.4.1.48)
- 3.1.8. Under the PBL contract; Engine Health Management Plus (EHM+) duties are performed by the contractor. (See AFI 21-101, Paragraph 3.4.1.49)
- 3.1.9. Wing Aircraft Structural Integrity Program (ASIP) and the Individual Aircraft Tracking (IAT) portion of ASIP are an integrated function within the ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/IAT data collection or reporting of quarterly data to the MAJCOM at this time. Units will still assign an ASIP Project Officer to coordinate any ASIP/IAT issues. (See AFI 21-101, Paragraph 3.4.1.53)
- 3.1.10. F-35 units use the ALIS to manage International Civil Aviation Organization (ICAO) codes for on/off-station possessed aircraft. (See AFI 21-101, Paragraph 3.4.1.64)
- 3.1.11. Ensure cannibalization of parts are properly coordinated and are not used to circumvent the supply system, which can have a costly impact to the PBL contract. (See AFI 21-101, Paragraph 3.4.1.67)
- 3.1.12. The intent of Air Force Repair Enhancement Program (AFREP) is performed through the established PBL standards. (See AFI 21-101, Paragraph 3.4.1.71)

# 3.2. Maintenance Operations Officer (MOO)/Maintenance Superintendent (MX SUPT) Responsibilities

- 3.2.1. Ensure engine download data is fully maintained in the ALIS and Pratt & Whitney EMS. SOI 1513.06. (See AFI 21-101, Paragraph 3.8.8)
- 3.2.2. Special Purpose Recoverable Authorized Maintenance (SPRAM) accounts. All items are maintained IAW PBL standards as established by ALGS and LST. (See AFI 21-101, Paragraph 3.8.32)
- 3.2.3. Ensure the use of ARs in the ALIS to report materiel deficiencies. SOI 1514.02. (See AFI 21-101, Paragraph 3.8.33)

# **3.3. Flight Commander/Flight Chief or AMU Officer in Charge (OIC)/Superintendent:** These positions are rated on IAW 36-2406 and will:

- 3.3.1. Ensure maintenance is performed IAW JTD. SOI 1514.02 and 1511.01. (See AFI 21-101, Paragraph 3.9.6)
- 3.3.2. Ensure asset management is accomplished IAW PBL standards. Warranty Items are analyzed by the Joint Strike Fighter Program Office (JSFPO). Deficiency reporting is accomplished IAW paragraph 3.8.33 of this instruction. SOI 1514.02. (See AFI 21-101, Paragraph 3.9.33)
- 3.3.3. Recommend bench stock requirements through an Action Request. Approval authority resides with established PBL. SOI 1514.02. (See AFI 21-101, Paragraph 3.9.35)

# 3.4. /Chief

- 3.4.1. Review the Computerized Maintenance Management System (CMMS) on a daily basis to monitor scheduled and deferred events. SOI 1505.16 and 1505.19. (See AFI 21-101, Paragraph 3.10.8)
- 3.4.2. Review the work center ALIS data entries for the previous day and all preceding non-duty days in CMMS for job accuracy and completeness. (See AFI 21-101, Paragraph 3.10.9)
- 3.4.3. Use the ALIS to submit an AR identifying discrepancies. SOI 1514.02. (See AFI 21-101, Paragraph 3.10.30)

### 3.5. Production Superintendent (Pro Super)

- 3.5.1. Release (exceptional release (ER)) aircraft for flight via the CMMS tool in the ALIS IAW SOI 1505.18. An ER will include review of all opened, closed, and deferred work packages produced since last exceptional release. Additionally, all Production Aircraft Inspection Requirements (PAIRs) will be reviewed for currency. SOI 1505.18. (See AFI 21-101, Paragraph 3.11.3)
- 3.5.2. When authorized by the MXG/CC, ensure cannibalization of parts are properly coordinated and are not used to circumvent the supply system, which can have a costly impact to the PBL contract. (See AFI 21-101, Paragraph 3.11.10)

# AIRCRAFT/HELICOPTER MAINTENANCE SQUADRON (AMXS/HMXS)

# 4.1. Flightline Expediter

- 4.1.1. Maintain copies of the following in the expediter vehicle: Flying schedule, emergency action and functional checklists, base grid map with cordon overlay, Quick Reference List (QRL) (if developed), and tracking device for aircraft status. The Minimum Essential Function Listing (MEFL), Logistic Control Number (LCN), and IPI listing are internal to the ALIS. (See AFI 21-101, Paragraph 4.6.8)
  - 4.1.1.1. Any limitations to Low Observable (LO) status will be tracked in Low Observable Health Assessment System (LOHAS). (See AFI 21-101, Paragraph 4.6.8.1)
- 4.1.2. Use the ALIS/CMMS tool to monitor back-ordered and requisitioned parts. (See AFI 21-101, Paragraph 4.6.12)
- 4.1.3. Debrief is accomplished electronically after each flight via the ALIS. SOI 1513.05. (See AFI 21-101, Paragraph 4.6.16)

#### 4.2. Aircrew and Maintenance Debrief Section

- 4.2.1. Check the ALIS for Airframe Time. (See AFI 21-101, Paragraph 4.7.4)
- 4.2.2. Schedule deviations are part of the process embedded within the ALIS. (See AFI 21-101, Paragraph 4.7.9)

#### 4.3. Aircraft Section

4.3.1. Aircraft Sections will perform propulsion tasks.

# 4.4. Weapons Section

- 4.4.1. The weapons section NCOIC/Chief will:
  - 4.4.1.1. AME and NIE on-equipment inventory is tracked in the ALIS. (See AFI 21-101, Paragraph 4.10.1.18)
  - 4.4.1.2. Dash-21 inventory is tracked in the ALIS. (See AFI 21-101, Paragraph 4.10.1.25)
  - 4.4.1.3. Ensure JSFPO provides CTKs IAW production contract guidelines. (See AFI 21-101, Paragraph 4.10.1.26)

### 4.5. Weapons expediter

4.5.1. Maintain copies of the following in the expediter vehicle: Flying schedule, emergency action and functional checklists, base grid map with cordon overlay, Quick Reference List (QRL) (if developed), and tracking device for aircraft status. The Minimum Essential Function Listing (MEFL), Logistic Control Number (LCN), and IPI listing are internal to the ALIS. (See AFI 21-101, Paragraphs 4.6.8 and 4.10.5.12)

# **4.6. AMU Supply Support Element.** Supply support will:

- 4.6.1. Requisition parts through the ALIS/CMMS tool. When necessary, Supply personnel can assist with follow up via contacting JSF Supply warehouse. (See AFI 21-101, Paragraph 4.13.1)
- 4.6.2. DIFM/RMA assets will be tracked within the PBL construct via JSF Supply warehouse using the Industrial and Financial System (IFS) tool. (See AFI 21-101, Paragraph 4.13.4)
- 4.6.3. In accordance with the PBL contract, the unit is responsible for management, including replacement of damaged or lost reusable containers. The LRS will subsume F-35 packaging and reusable container responsibilities consistent with process used for legacy assets. (See AFI 21-101, Paragraph 4.13.5)
- 4.6.4. The aircraft Tail Number Bin (TNB) will be controlled and managed within the support sections consistent with existing legacy procedures. (See AFI 21-101, Paragraph 4.13.6)

## MAINTENANCE SQUADRON (MXS)

# 5.1. MX Operations Officer(MOO)/MX SUPT Responsibilities

- 5.1.1. Base level repair capability is performed through the established PBL standards, if applicable. (See AFI 21-101, Paragraph 5.2.2)
- 5.1.2. Utilize the CRM tool in the ALIS to submit an AR for JTD changes/clarification. SOI 1514.02. (See AFI 21-101, Paragraph 5.2.6)

# **5.2.** Specialist Support.

5.2.1. Perform reviews of the ALIS to determine status prior to beginning any tasks on an aircraft. SOI 1505.13. (See AFI 21-101, Paragraph 5.4.1.2)

#### 5.3. Accessories Flight

5.3.1. Electro Environmental responsibilities reside in Specialist Section in AMXS. (See AFI 21-101, Paragraph 5.5)

# 5.4. Aerospace Ground Equipment (AGE) Flight

- 5.4.1. The AGE Flt CC/Chief will:
  - 5.4.1.1. The AGE MEL is determined in accordance with PBL standards. (See AFI 21-101, Paragraph 5.6.2.1)
  - 5.4.1.2. Ensure equipment is shipped according to program disposition instructions. (See AFI 21-101, Paragraph 5.6.2.13)

#### 5.5. Avionics Flight

5.5.1. The intent of the Avionics Flight is accomplished through the established PBL standards. (See AFI 21-101, Paragraph 5.8)

### 5.6. Fabrication Flight

- 5.6.1. The NDI section NCOIC will establish/obtain NDI inspection technique files by submitting an AR to ALGS Operations Center and LST through the ALIS. SOI 1514.02. (See AFI 21-101, Paragraph 5.9.4.2.3)
- 5.6.2. Low Observable Aircraft Structural Maintenance Section. Follow CAFI 21-105 as applicable.

### 5.7. Propulsion Flight

5.7.1. Propulsion Flight responsibilities are performed by Aircraft Section due to the F-35 maintenance concept. (See AFI 21-101, Paragraph 5.12)

### 5.8. Test, Measurement, and Diagnostic Equipment (TMDE) Flight

5.8.1. TMDE responsibilities are managed through the PBL contract for program specific PMEL items.

# MAINTENANCE OPERATIONS SQUADRON

# **6.1.** Maintenance Operations Flight (MOF)

- 6.1.1. MOF/CC/Chief (MOF/SUPT). Will:
  - 6.1.1.1. Ensure aircraft status and assignment/possession changes are accurately reported and maintained in the ALIS. SOI 1505. (See AFI 21-101, Paragraph 6.2.1.5)
  - 6.1.1.2. Use the ALIS to manage ICAO codes for on/off-station possessed aircraft. (See AFI 21-101, Paragraph 6.2.1.8)
  - 6.1.1.3. Workspace for MSL not applicable. (See AFI 21-101, Paragraph 6.2.1.10)
- 6.1.2. Maintenance Operations Center (MOC)
  - 6.1.2.1. The MOC will use the ALIS to monitor and coordinate sortic production, maintenance production, communicate priorities, and execution of the flying and maintenance schedules while maintaining visibility of fleet health indicators. (See AFI 21-101, Paragraph 6.2.2)
  - 6.1.2.2. Reference the ALIS and SOI 1505.13 for air vehicle status reporting. (See AFI 21-101, Paragraph 6.2.2.23.1)
- 6.1.3. Maintenance Management Analysis (MMA) Section
  - 6.1.3.1. The ALIS is the primary source of data. MMA requirements are limited by the ALIS capabilities. The ALIS administrators will act as the group POC for MIS issues. (See AFI 21-101, Paragraph 6.2.6)
  - 6.1.3.2. The intent of IREP is performed through the established PBL standards. (See AFI 21-101, Paragraph 6.2.6.7)
  - 6.1.3.3. The ALIS administrators are responsible for system database management. (See AFI 21-101, Paragraph 6.2.6.11)
  - 6.1.3.4. Base Repair Program/IREP is performed through the established PBL standards. (See AFI 21-101, Paragraph 6.2.6.13)
  - 6.1.3.5. The ALIS administrators are responsible for system database management. (See AFI 21-101, Paragraph 6.2.6.16.4)
  - 6.1.3.6. PS&D will be the POC for special inspection, time change, TCTD, and aircraft equipment transfer; however, the contractor is responsible for overall management. (See AFI 21-101, Paragraph 6.2.6.16.5.2)
  - 6.1.3.7. The DIT will include participation from PS&D, MOC, Debrief Section, and QA as determined by MMA. Data Integrity Team (DIT) meetings will be held quarterly (at a minimum). (See AFI 21-101, Paragraph 6.2.6.16.6)

# MAINTENANCE PLANS, SCHEDULING AND DOCUMENTATION (PS&D)

#### 7.1. General

- 7.1.1. PS&D requirements are limited by the ALIS capabilities. (See AFI 21-101, Paragraph 7.1)
- 7.1.2. The intent of suspense validation is an embedded function within the ALIS. (See AFI 21-101, Paragraph 7.1.6)
- 7.1.3. The ADR process checklist is an embedded function within the ALIS. (See AFI 21-101, Paragraph 7.1.10)

# 7.2. Manage the following programs for assigned aircraft and equipment using the following guidelines:

- 7.2.1. Prior to pre-dock meeting use the ALIS as the source of record for items out of configuration. (See AFI 21-101, Paragraph 7.2.2.1.7)
- 7.2.2. Use the ALIS in lieu of IMDS for pre-dock meetings. (See AFI 21-101, Paragraph 7.2.2.2)
- 7.2.3. Use the ALIS in lieu of IMDS for post-dock meetings. (See AFI 21-101, Paragraph 7.2.3)
- 7.2.4. Configuration Management (CM) is managed by the contractor through the ALIS. (See AFI 21-101, Paragraph 7.2.4)
- 7.2.5. For major maintenance work processing PS&D will coordinate on AR submissions through the ALIS CRM application IAW paragraph 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 7.2.5.1)

#### 7.2.6. TCTO Management

- 7.2.6.1. QA personnel will use the CRM application in the ALIS to submit an AR to report TCTD deficiencies, IAW F-35 Addendum paragraph 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 7.2.6.2.1.3)
- 7.2.6.2. TCTD management is in accordance with PBL standards. (See AFI 21-101, Paragraph 7.2.6.2.2.1)
- 7.2.6.3. TCTD kits will be managed by the Air System Contractor (ASC) or Propulsion System Contractor (PSC). (See AFI 21-101, Paragraph 7.2.6.2.2.5)
- 7.2.6.4. PS&D will control and release TCTD kits from contractor sources in accordance with PBL standards. (See AFI 21-101, Paragraph 7.2.6.2.2.6)
- 7.2.7. TCI forecasting is managed in accordance with PBL standards. (See AFI 21-101, Paragraph 7.2.7)
- **7.3. Reference SOI 1505.** 19 for Maintenance and Operations Planning. (See AFI 21-101, Paragraph 7.6.1)

**7.4. Wing Aerospace Vehicle Distribution Officer (AVDO).** This responsibility is handled through the Action Request process, IAW paragraph 14.9. (See AFI 21-101, Paragraph 7.10.1)

## **QUALITY ASSURANCE (QA)**

# 8.1. Chief Inspector Responsibilities

8.1.1. A master standardized AFTO IMTs 781-series forms binder not applicable. (See AFI 21-101, Paragraph 8.4.10)

### **8.2.** QA Product Improvement Programs (PIP)

- 8.2.1. Use the Action Request in the ALIS to report material deficiencies, IAW SOI 1514.02 and paragraph 14.9. (See AFI 21-101, Paragraph 8.12.2.1)
- **8.3. Configuration Management (CM) and Modification Management.** CM is managed by the contractor through the ALIS. (See AFI 21-101, Paragraph 8.13)
- **8.4.** Technical Order Distribution Office (TODO). JTD is managed by ALGS and LST. (See AFI 21-101, Paragraph 8.14)
- **8.5. Functional Check Flights (FCFs) to include Operational Check Flights (OCFs).** The criteria used to determine if/when a Check Flight is required is identified within JTD as follow on to a TCTD, via an Action Request Response (ARR) or as outlined in AFI 21-101. SOI 1505.23. (See AFI 21-101, Paragraph 8.16)

# 8.6. Weight and Balance (W&B) Program

8.6.1. If discrepancies exist within Weight and Balance records/data an AR must be submitted utilizing the CRM tool in the ALIS to correct discrepancies, IAW SOI 1505.20 and paragraph 14.9. (See AFI 21-101, Paragraph 8.19.1)

# IMPOUNDMENT PROCEDURES

# 9.1. Impoundment Process and Procedures

9.1.1. When required, the Impoundment Official will notify the ALIS system administrator for system lockdown. SOI 1505.14. (See AFI 21-101, Paragraph 9.6.5.2)

# TOOL AND EQUIPMENT MANAGEMENT

**10.1. Tool and Equipment Management.** F-35 program provided tools will be tracked and maintained in the ALIS, each tool is marked with an appropriate logistics control/sequence number. SOI 1508.06. (See AFI 21-101, Paragraph 10.1)

#### MAINTENANCE SUPPLY SUPPORT

- **11.1. Ordering Parts.** Aircraft parts are ordered from JSF Supply warehouse through CMMS/IFS interface. (See AFI 21-101, Paragraph 11.4)
- **11.2. MICAP Processing.** Mission Capable sourcing and request for upgrade, downgrade and cancel MICAP requirements are coordinated with JSF Supply. (See AFI 21-101, Paragraph 11.5)
- **11.3. Bench Stock.** Workcenter supervisors request bench stock levels through an Action Request. (See AFI 21-101, Paragraph 11.7)
- **11.4. Time Compliance Technical Order (TCTO) Kit Procedures.** TCTD kits are provided through the established PBL contract. (See AFI 21-101, Paragraph 11.17)
- **11.5. Production Scheduling.** The intent of production scheduling is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.20)
- **11.6. Repair Cycle Assets.** The intent of repair cycle asset management is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.22)
- **11.7. DIFM.** DIFM will be managed IAW applicable SOIs, SCM Warehouse Guide, ALIS Users Guide and established PBL/PBA metrics. (See AFI 21-101, Paragraph 11.23)
- **11.8. Bench Check and Repair Policy.** The intent of bench check and repair is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.26)
- **11.9. Maintenance Turn-Around (TRN) Record Update Processing.** The intent of maintenance turn-around record update processing is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.27)
- **11.10. Buildup Items.** The ALIS will be used to manage built up items (e.g. wheel/tire) from alternate location. (See AFI 21-101, Paragraph 11.29)
- **11.11. Deficiency Report (DR) Exhibits.** Utilize the AR program. (See AFI 21-101, Paragraph 11.31)
- **11.12. Work Center Supply Management.** Government furnished materiel/equipment (including POL and common hazardous material) will be ordered via organic/legacy supply system (i.e., SBSS, EESOH-MIS, etc). (See AFI 21-101, Paragraph 11.32)
- **11.13. Maintenance Repair/Supply Delivery Priorities.** Priorities are managed through the ALIS. (See AFI 21-101, Paragraph 11.33)
- **11.14. Intermediate Repair Enhancement Program (IREP).** The intent of IREP is performed through the established PBL standards. (See AFI 21-101, Paragraph 11.34)

### WING WEAPONS MANAGER AND WEAPONS STANDARDIZATION

### 12.1. Wing Weapons Manager (WWM)

12.1.1. Ensure an AR is submitted for SE requiring repair when procedures are not established. (See AFI 21-101, Paragraph 12.1.31)

# 12.2. Loading Standardization Crew (LSC)

12.2.1. Review and coordinate loading related JTD ARs in the ALIS CRM tool. (See AFI 21-101, Paragraph 12.3.4)

# MOBILITY AIRCRAFT DEFENSIVE SYSTEMS LOADING POLICY

# 13.1. General

13.1.1. No additional guidance required for F-35 aircraft.

### ADDITIONAL MAINTENANCE REQUIREMENTS AND PROGRAMS

### 14.1. Aircraft Structural Integrity Program (ASIP)

14.1.1. The Individual Aircraft Tracking (IAT) portion of ASIP is an integrated function within the ALIS and the aircrew debriefing process. There is no maintenance intervention in the ASIP/IAT data collection or reporting of quarterly data to the MAJCOM at this time. Units will still assign an ASIP Project Officer to coordinate any ASIP/IAT issues. (See AFI 21-101, Paragraph 14.6.1)

### 14.2. Cannibalization Program

14.2.1. Unnecessary cannibalization of parts to circumvent the supply system can have a costly impact on the PBL contract. SOI 1505.15. (See AFI 21-101, Paragraph 14.8.1)

### 14.3. Crash Damaged or Disabled Aircraft Recovery (CDDAR) Program

14.3.1. Additional CDDAR training will be provided at the Integrated Training Center (ITC). SOI 1505.01. (See AFI 21-101, Paragraph 14.10.7.1)

### 14.4. Dropped Object Prevention (DOP) Program

14.4.1. For deficiencies discovered/suspected submit an AR IAW para 14.9. SOI 1514.02. (See AFI 21-101, Paragraph 14.11.1.4)

### 14.5. Engine Run Training and Certification Program

- 14.5.1. Integrated Power Plant (IPP). (See AFI 21-101, Paragraph 14.15.2.3)
- 14.5.2. Part I and Part II testing does not apply to PMA operators from the ground. (See AFI 21-101, Paragraph 14.15.11.2)
- 14.5.3. IPP operators using only the PMA from the ground need not be tracked on the SCR. (See AFI 21-101, Paragraph 14.15.12.1)

### 14.6. Foreign Object Damage (FOD) Prevention Program

- 14.6.1. Utilize an AR IAW paragraph 14.9. SOI 1514.02 . (See AFI 21-101, Paragraph 14.19.5.1.1)
- 14.6.2. Utilize an AR IAW paragraph 14.9. SOI 1514.02 . (See AFI 21-101, Paragraph 14.19.5.2.3)

### 14.7. Hot Refueling Procedures

14.7.1. Units coded "CC" certified for hot refueling develop and maintain the capability to quickly and safely hot refuel those assigned aircraft (applicable to ANG if tasked). (See AFI 21-101, Paragraph 14.23.1)

### 14.8. Radar Warning Receiver (RWR)/Radar Threat Warning (RTHW) Testing

14.8.1. External testing and appointment of RWR/RTHW manager is not required. (See AFI 21-101, Paragraph 14.28.1)

### 14.9. Customer Relationship Management Program. SOI 1514.02

#### 14.9.1. Responsibilities.

- 14.9.1.1. The CRM tool within the ALIS shall be used to report problems via an AR. All ARs raised via CRM shall be transmitted via the Optional and Required Screening Points (OSP & RSP). These points screen ARs for accuracy of entries and information as well as prevent classified, sensitive or International Trade in Arms (ITAR) information from being transmitted. In addition to the ALIS System Permission Request (ASPR), OSP and RSP personnel shall be designated in writing to the ALIS administrators by the group commander assigned (MXG/CC or OG/CC) based upon squadron. Those units not assigned to established groups will be designated by the appropriate site lead or QA department.
- 14.9.1.2. ARs shall be submitted for reporting actions that require rectification outside the capability of the local unit. Examples of such cases are JTD changes, modifications, engineering analysis etc. Many of these occasions have specific forms in existing policy documents; the AR process will replace these mediums in the F-35 environment.
- 14.9.1.3. The AR "Severity" provides an additional level of classification to the AR beyond that provided by the category. Severities are ranked as high, medium and low with each having its own corresponding impact.
- 14.9.1.4. The AR "Category" identifies conditions by relative importance and the urgency of the resolution required. Category 1 with severity classification of "high" has the most severe consequences, resulting in potentially hazardous condition. ARs must provide adequate detail to support the desired category.
- 14.9.1.5. To ensure a thorough review prior to submittal, ARs should not be processed as initiator, OSP and RSP by the same individual. Exceptions may be made if there are no alternative measures available.

#### 14.9.2. Overall timelines for ARs.

14.9.2.1. Established timelines will be adhered to in the AR process. These timelines are general guidelines for AR initiation. Every level of approval must remain cognizant of timelines to prevent undue delay of ARs. Delays must be communicated to the OSP and RSP during the AR initiation process.

#### 14.9.3. AR Submission Process.

#### 14.9.3.1. Initiator shall:

- 14.9.3.1.1. Exhaust all available means of resolution prior to submitting an AR.
- 14.9.3.1.2. Inform expeditor or aircraft crew chief of AR requirement.
- 14.9.3.1.3. Inform supervision of AR request to be implemented.
- 14.9.3.1.4. Ensure detail is added to AR to alleviate vagueness.
- 14.9.3.1.5. Include tail number of aircraft if AR is related to an aircraft.
- 14.9.3.1.6. Include JTD number if AR is related to JTD.
- 14.9.3.1.7. Utilize SOI 1514.02 to ensure correct AR categorization, severity and classification.

- 14.9.3.1.8. Submit AR with format shown in Attachment 3.
- 14.9.3.1.9. Notify Squadron OSP of AR submittal.
- 14.9.3.1.10. Monitor AR status via CRM tool.

### 14.9.3.2. OSP shall:

- 14.9.3.2.1. Review all AR submissions to ensure the correct priority has been assigned and AR submission is valid.
- 14.9.3.2.2. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).
- 14.9.3.2.3. Ensure details provided by initiator explain problem completely.
- 14.9.3.2.4. Approve and submit ARs to the RSP.
- 14.9.3.2.5. Notify RSP of AR submittal.
- 14.9.3.2.6. Monitor AR status via CRM tool.

#### 14.9.3.3. RSP shall:

- 14.9.3.3.1. Ensure AR has been routed through OSP prior to submittal.
- 14.9.3.3.2. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).
- 14.9.3.3.3. Ensure details provided by initiator and OSP explain problem completely.
- 14.9.3.3.4. Once request is validated submit AR to ALGS and monitor the AR's status via CRM tool.

#### 14.9.3.4. ALGS role.

- 14.9.3.4.1. ALGS responsibilities are outlined in SOI 1514.02.
- 14.9.4. Resolution of AR Disparities:
  - 14.9.4.1. Disparities of AR submittals will be resolved by the MXG/CC or OG/CC.

#### 14.9.5. AR Review Team.

- 14.9.5.1. ARs shall be reviewed at all levels to ensure proper categorization and severity is assigned.
- 14.9.5.2. Squadron OSP and respective RSP must consider fleet implications when preparing ARs for submittal. Depending upon the circumstances for the AR, an AR may have an impact on all assigned aircraft/equipment regardless of the squadron assigned. Generally, ARs categorized as Category 1 (High, Medium, Low) or Category II (High) will fall into this criteria.
- 14.9.5.3. If an AR has fleet implications, respective squadron RSP will coordinate with additional squadrons to review the potential AR prior to submittal. All affected squadron RSPs will review the potential AR for impacts on their unit. Additionally, an AR review will be conducted to ensure all information is accurate and the proper category and severity has been assigned.

- 14.9.5.4. The review team shall consist of the following if applicable as determined by RSP:
  - 14.9.5.4.1. QA Representative.
  - 14.9.5.4.2. OG Representative.
  - 14.9.5.4.3. Contractor Representative.
  - 14.9.5.4.4. Subject Matter Expert.
- 14.9.5.5. ARs determined to have fleet implications will be annotated on AR by respective squadron RSP. Respective squadron RSP will annotate the review in the AR comment section prior to submittal by listing affected organizations and members of AR Review Team in attendance (see Attachment 3).
- 14.9.6. AR process flow.
  - 14.9.6.1. Normal AR process flow.
    - 14.9.6.1.1. Squadron initiator prepares AR and informs supervision of intent for submittal. Notify Squadron OSP of AR submittal.
    - 14.9.6.1.2. Squadron OSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable). Submit AR for RSP approval.
    - 14.9.6.1.3. Respective squadron RSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable). Submit AR to ALGS.
  - 14.9.6.2. AR process flow having potential fleet implications.
    - 14.9.6.2.1. Squadron initiator prepares AR and informs supervision of intent for submittal. Notify Squadron OSP of AR submittal.
    - 14.9.6.2.2. Squadron OSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable). Submit AR for RSP approval.
    - 14.9.6.2.3. Respective squadron RSP reviews AR submission to ensure the correct priority has been assigned and AR submission is valid. Ensure all information/attachments provided on AR are technically accurate, complete and annotate comments (if applicable).
    - 14.9.6.2.4. Squadron RSP coordinates AR through all affected squadrons. Coordination can take place by meeting, phone, email or any medium necessary to inform all units of potential fleet implications.
    - 14.9.6.2.5. All affected squadron RSPs review AR. Respective squadron RSP annotates AR when AR Review Team review is complete (see Attachment 3).
    - 14.9.6.2.6. Respective squadron RSP submits AR to ALGS.

- 14.9.7. Leadership review.
  - 14.9.7.1. It is the RSP's responsibility to ensure group leadership is notified prior to AR submittal. All major maintenance will be coordinated with respective group commander or their designated representative prior to AR submittal. For instance, QA is responsible for notifying MXG/CC prior to submitting an AR for major maintenance resulting in an unserviceable condition of an aircraft.
  - 14.9.7.2. Squadron and group leadership should be briefed periodically on high interest ARs.
  - 14.9.7.3. Reports available in the ALIS CRM are encouraged for briefing material.
  - 14.9.7.4. Group commanders may further define guidelines for AR reviews within their group prior to AR submittal.
- 14.9.8. Operations under more than one Standard Operating Unit (SOU).
  - 14.9.8.1. All procedures as defined above will apply.
  - 14.9.8.2. The ALIS accounts will be established on additional SOUs as required. As the ALIS matures, personnel may be loaded on additional SOUs as Customer Review Board representatives.
  - 14.9.8.3. Procedures will be further defined as additional SOUs are established.
- 14.9.9. CRM team member composition.
  - 14.9.9.1. CRM is arranged by teams. Each team is comprised of members from specified squadrons and groups. Obtaining team composition is imperative to assignment of AR review responsibilities.
  - 14.9.9.2. Respective RSPs will designate team members requiring OSP and RSP permissions to the local ALIS administrators, the ALGS and LST by letter for the team/teams under their area of responsibility:
    - 14.9.9.2.1. This process of gaining OSP and RSP permissions does not alleviate completing the permissions section on the ALIS System Permission Request Form.
    - 14.9.9.2.2. Distribution Team members are responsible for receiving Urgent Field Notices (UFN), Time Compliance Technical Data and other correspondence from ALGS.
  - 14.9.9.3. Distribution team responsibilities include the following at a minimum:
    - 14.9.9.3.1. Information is forwarded to appropriate organization within their team/teams for action.
    - 14.9.9.3.2. Receipt of information forwarded to ALGS as required. For example, when a UFN is received, MOC will report receipt to ALGS for items concerning the MXG. This notification is confirmation to ALGS that the field has received the UFN.
- 14.9.10. Contingency Back-up. In the event CRM is down, the following process shall be utilized to initiate an AR.
  - 14.9.10.1. Utilize the AR draft template found in Attachment 4.

14.9.10.2. Submit AR via:

14.9.10.2.1. Fax - 1-817-777-1868.

14.9.10.2.2. Email - jsf-algs-center.fcaero@lmco.com.

14.9.10.2.3. Phone - 1-888-433-5677.

14.9.11. Classified AR procedures.

14.9.11.1. Ensure classified ARs are produced IAW SOI 1514.02.

14.9.11.2. Protect classified information during the AR initiation process.

14.9.11.3. Consult assigned security manager for assistance, if necessary.

# MAINTAINING COMMERCIAL DERIVATIVE AIRCRAFT

# 15.1. Background Information and Objective

15.1.1. No additional guidance required for F-35 aircraft.

# AIRCREW EGRESS SYSTEMS MAINTENANCE

# **16.1. Egress Maintenance:**

16.1.1. Egress personnel are responsible for egress systems canopy maintenance. (See AFI 21-101, Paragraph 16.1.2)

MARK A. ATKINSON, Maj Gen, USAF Director of Logistics

#### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

### References

AFI 21-101, Aircraft and Equipment Maintenance Management, Interim Change 1, 11 Aug 2011

AFI 21-101, CAFSUP\_I, CAF: Aircraft and Equipment Maintenance Management, 11 Jul 2012

AFI 36-2406, Officer and Enlisted Evaluation Systems, Interim Change 3, 11 Oct 2011

AFMAN 33-363, Management of Records, 1 Mar 2008

CAFI 21-105, Fabrication Program, 2012

TO 00-5-1, AF Technical Order System, 1 May 2011

#### Adopted Forms

AF Form 847, Recommendation for Change of Publication

### Abbreviations and Acronyms

**ALIS**—Autonomic Logistics Information System

**ALGS**—Autonomic Logistics Global Sustainment

**AR**—Action Request

**ASC**—Air System Contractor

**CMMS**—Computerized Maintenance Management System

**CRM**—Customer Relationship Management

ICAO—International Civil Aviation Organization

IPP—Integrated Power Plant

**JPO**—Joint Program Office

JTD—Joint Tech Data

**LCN**—Logistics Control Number

**MEFL**—Minimum Essential Function List

**PBL**—Performance Based Logistics

**PMA**—Portable Maintenance Aid

**PSC**—Propulsion System Contractor

**SOI**—Sustainment Operating Instruction

**TCTD**—Time Compliance Technical Directive

#### **EXAMPLE AR ROUTING SCENARIOS**

#### Example AR scenario where first level RSP submits AR to ALGS.

Contractor maintenance personnel discovers a broken nutplate that requires drilling. During the repair process the drill bit fails and creates a scratch in the aircraft panel. JTD is not available to repair the damaged panel. AR is drafted for repair procedures and submitted by initiator to OSP for review. OSP reviews the AR, annotates comments, approves AR and forwards to RSP. RSP reviews the AR, annotates comments, approves the AR and forwards to ALGS. AR Review Team is not organized because damage is from a known source and does not have fleet wide implications.

### Example AR scenario with fleet implications.

Maintainer discovers a stress crack on panel 100. JTD does not exist to repair damage on the panel. AR is drafted for repair procedures by and submitted by initiator to OSP for review. OSP reviews the AR, annotates comments, accepts and forwards the AR to first level RSP. First level RSP reviews the AR, annotates comments and determines stress crack may have fleet wide implications. First level RSP informs additional squadrons and starts actions to stand-up AR Review Team. AR Review Team reviews AR and agrees with potential impact to the fleet. First level RSP annotates AR upon completion of AR Review Team review (see Attachment 3). In this scenario, an AR Review Team review is conducted because the damage is caused by an unknown source and may have fleet wide implications. The first level RSP will ensure all units are aware of potential fleet problem at Eglin AFB. First level RSP will annotate AR after AR Review Team review is complete.

#### AR TEMPLATE FOR SUBMITTAL

**Assigning a Title.** When writing the title of the AR, include section designation (i.e. MIL for military, SCM for Supply Chain Management, etc). Ensure to include specific JTD or tail number in title (Example, "MIL – ACFT 0748 Panel 1 Crack).

**Body of comments.** Include all detailed information involving the AR. Be descriptive as possible and keep in mind not all personnel reviewing the AR will know specialty code specific language, use common terms and abbreviations. As applicable include left/right, forward/aft, upper/lower, inboard/outboard, dimensions (length/width/depth); photographs, part numbers, and stock numbers. Also, annotate if an example or sample has been provided with the AR.

#### **OPR**

Office

Contact Number

### AR Team Review (If applicable)

Annotate Date of Review

Annotate Team Members Involved

**Annotate Comments** 

# AR CONTINGENCY TEMPLATE FOR SUBMITTAL

Response Type:
Date Reported:
Severity:
Category:
Part Number (If Applicable):
Location:
Aircraft Tail Number ( If Applicable):
OPR (Office, Contact Number):
Initiator (Rank, Name, Office, Contact Number):
OSP (Rank, Name, Office, Contact Number):
RSP (Rank, Name, Office, Contact Number):
Initiator Details:
OSP Comments:
RSP Comments: